

$$\begin{matrix} 100 \\ \left[\begin{matrix} R \\ G \\ B \end{matrix} \right] \end{matrix} = \begin{matrix} 102 \\ \left[\begin{matrix} E_{ry} & E_{ru} & E_{rv} \\ E_{gy} & E_{gu} & E_{gv} \\ E_{by} & E_{bu} & E_{bv} \end{matrix} \right] \end{matrix} \cdot \begin{matrix} 104 \\ \left[\begin{matrix} Y \\ U \\ V \end{matrix} \right] \end{matrix}$$

Fig. 1 (*prior art*)

$$\begin{matrix} 118 \\ \left[\begin{matrix} X \\ Y \\ Z \end{matrix} \right] \end{matrix} = \begin{matrix} 114 \\ \left[\begin{matrix} X_{scale} \\ Y_{scale} \\ Z_{scale} \end{matrix} \right] \end{matrix} \cdot \begin{matrix} 112 \\ \left[\begin{matrix} X_a & X_b & X_c \\ Y_a & Y_b & Y_c \\ Z_a & Z_b & Z_c \end{matrix} \right] \end{matrix} \cdot \left(\begin{matrix} 108 \\ \left[\begin{matrix} A_{scale} \\ B_{scale} \\ C_{scale} \end{matrix} \right] \end{matrix} \cdot \begin{matrix} 106 \\ \left[\begin{matrix} A \\ B \\ C \end{matrix} \right] \end{matrix} + \begin{matrix} 110 \\ \left[\begin{matrix} A_{off} \\ B_{off} \\ C_{off} \end{matrix} \right] \end{matrix} \right) + \begin{matrix} 116 \\ \left[\begin{matrix} X_{off} \\ Y_{off} \\ Z_{off} \end{matrix} \right] \end{matrix}$$

Fig. 2

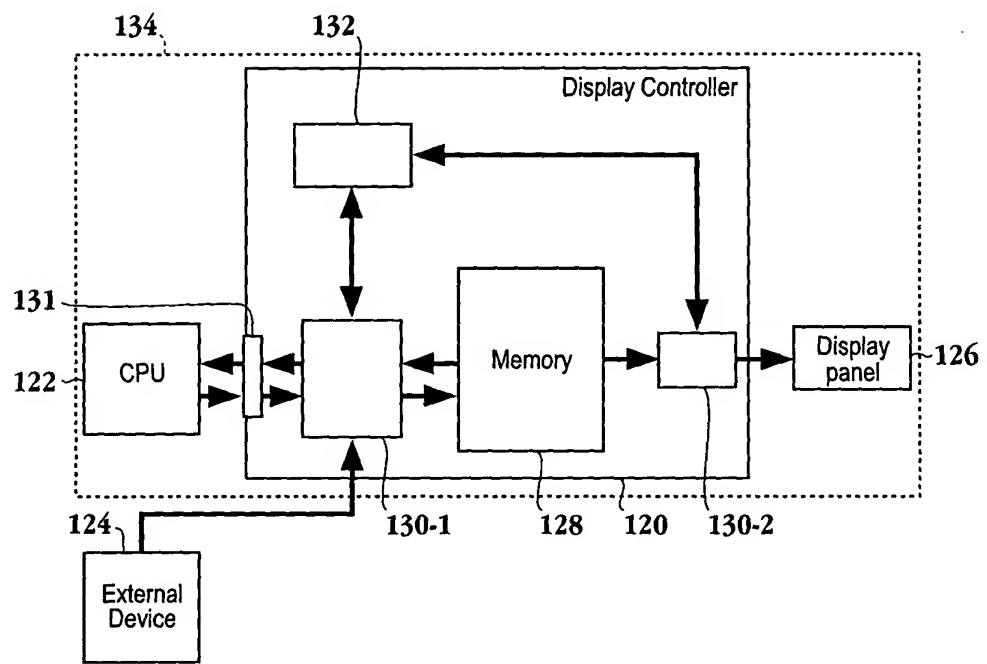


Fig. 3

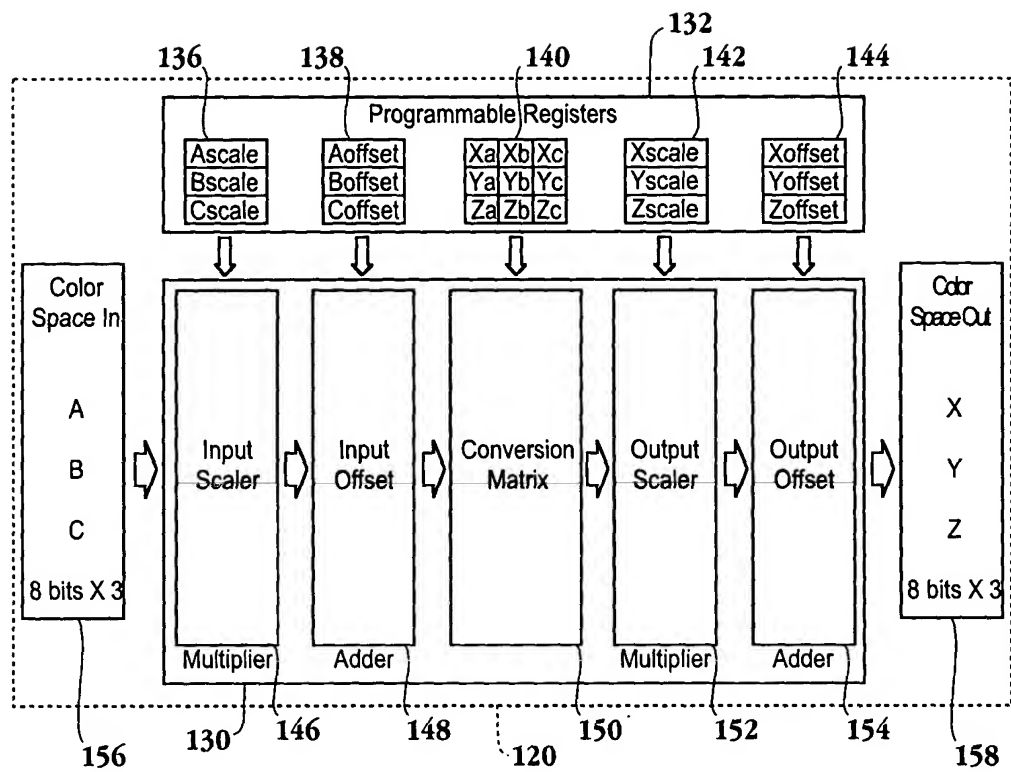


Fig. 4

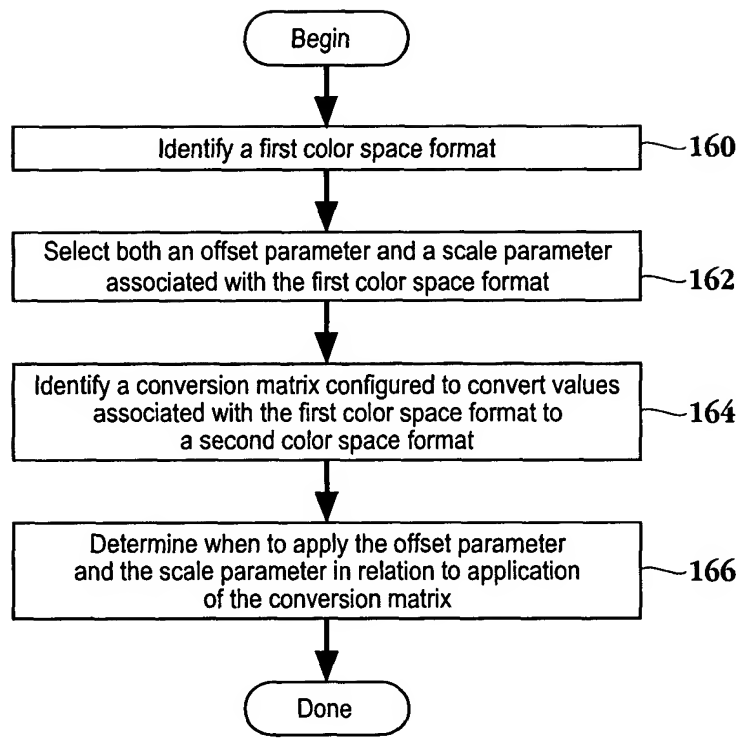


Fig. 5